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ABSTRACT

Reports on 13 science teaching societies are presented in this issue of "Science Education News." Each report generally includes such information as objectives, journals published, meetings, honors, innovative teaching awards, history of the society, and other information. The 13 societies included are the American Association of Physics Teachers, American Chemical Society, Association for the Education of Teachers in Science, Federation for Unified Science Education, Mathematical Association of America, National Association of Biology Teachers, National Association of Geology Teachers, National Association for Research in Science Teaching, National Council for the Social Studies, National Council of Teachers of Mathematics, National Science Supervisors Association, National Science Teachers Association, and School Science and Mathematics Association. (PR)

SCIENCE EDUCATION NEWS

American Association for the Advancement of Science

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December 1971

Science Teaching Societies

This issue of *Science Education News* is devoted to reports of 14 science teaching societies. These groups are contributing in important ways to the improvement of science teaching. In the long run, science teaching in the United States will be pretty much what these science teaching organizations are able to make it. They deserve your full support.—J.R.M.

American Association of Physics Teachers

Objectives. The objectives of the American Association of Physics Teachers (AAPT), as stated in its constitution, are "the advancement of the teaching of physics and the furtherance of appreciation of the role of physics in our culture."

Membership is individual and is open to anyone in agreement with the organizational objectives. A special category, junior membership, is available to full-time students who have a major interest in physics and who have completed at least two one-year college physics courses or equivalent.

Journals. The association sponsors two journals, the *American Journal of Physics* (AJP) and *The Physics Teacher* (TPT). In an informal sense, AJP has always been the official publication of AAPT. Thus, in addition to articles on physics and on physics education at all levels, it contains minutes and reports describing various organizational activities.

TPT is aimed primarily at teachers of introductory physics courses at any level, from elementary school to university. It meets this objective with a broad range of articles and editorials on innovations in the teaching of physics, discussions of the history and content of the subjects, and reviews of teaching materials of all kinds.

Meetings. National meetings of the association are held twice yearly, in a major city in late January or early February, and on a college or university campus in mid-June. In addition, AAPT recognizes 30 regional (geographic) sections, each of which holds one or more annual meetings.

Spectroscopy experiment at Edward Clark H.S., Las Vegas, Nevada.—Reprinted from Dec. 1970 issue of *The Physics Teacher*

Honors. Both national meetings feature the conferring of honors on outstanding physicists. These include the Oersted Medal, given for "notable contributions to the teaching of physics," the Robert A. Millikan Lecture Award for "creative teaching of physics," the Richtmyer Memorial Lecture, given by an invited distinguished physicist, and Distinguished Service Citations, awarded by AAPT in recognition of particularly meritorious service.

Innovative Teaching Awards. At each winter meeting the Association makes up to five awards of $500 each to high school physics teachers whose innovations in their own classes have resulted in demonstrable improvements. Any high school teacher may enter this competition simply by submitting a written article, before October 15, describing his program and documenting its accomplishments.

Film and Apparatus Competitions. In alternate years at the national winter meeting, a competition is held either for development of educational apparatus or the production of single-concept films. These contests are intended to stimulate more general preparation of these materials; thus, they offer substantial cash awards.

SE 013 193

Council on Physics in Education. In anticipation of an increased role for AAPT in physics education during the 1970s, its officers established in 1971 a major new coordinating body. Designated the Council on Physics in Education (CPE), it has a membership representing all levels of education and a responsibility for staying broadly cognizant of developments and needs in physics education as a whole.—WILBUR JOHNSON, *Executive Secretary, AAPT, 1785 Massachusetts Avenue, N.W., Washington, D.C. 20036.*

American Chemical Society

With a membership of 110,000, the American Chemical Society (ACS) is the world's largest scholarly society devoted to a single science. To help meet its commitment to education and the diffusion of chemical knowledge, the ACS conducts a large and diversified educational program dealing with chemical education at all levels—high school, college, graduate level, and continuing education.

In the field of high school chemistry, ACS was instrumental in the recent development of two new curricula: CHEM Study (Chemical Education Materials Study) and CBA (Chemical Bond Approach). Career guidance literature prepared by the society is widely distributed. The society's monthly journal *Chemistry* is written primarily for superior high school students, though it also has wide readership among college students, teachers, and graduate chemists.

It is well known that junior colleges are the fastest growing of all academic institutions. Many of them are establishing new programs for the training of chemical technicians. As a service to these institutions ACS has developed a recommended chemistry curriculum for technician programs and is now in process of preparing curriculum materials.

At the college level, the ACS Committee on Professional Training develops minimum standards for undergraduate chemistry programs and publishes an approved list of departments that meet these standards. The society's Division of Chemical Education publishes the world-respected *Journal of Chemical Education*, intended principally for college chemistry teachers. The ACS National Chemistry Examination Program provides standard examinations in chemistry at all levels. Other college-level services include *Academic Openings*, a three-times-a-year listing of teaching and postdoctoral openings in colleges, universities, and junior colleges, and *College Chemistry Seniors*, an annual publication providing resumés of about-to-graduate seniors for use by graduate schools.

Two ACS activities span both undergraduate and graduate chemical education. The *Directory of Graduate Research* is a complete listing of graduate facilities, with research interests and recent publications, of all U.S. institutions offering the Ph.D. in chemistry, biochemistry, and chemical engineering. The Petroleum Research Fund, with an annual income of three and one-half million dollars, makes funds available for research grants.

The newest and most rapidly expanding ACS educational activity is in the area of continuing education. The ACS Short Courses, begun in 1965, are designed for the graduate chemist or chemical engineer—B.A. through Ph.D.—who has been out working a few years and finds that during this interval entirely new disciplines have evolved—disciplines necessary to the everyday practice of his profession. ACS Short Courses in these new areas, each two or three days long, are now offered throughout the year and all over the country. More than 50 different subjects have been taught to date and five to ten new topics are added each year.

In 1968 continuing education via filmed instruction was inaugurated with the release of the first ACS Film Course, "Interpretation of Infrared Spectra." Still more recent is the program of ACS Audio Courses initiated in 1970. Designed for industrial, academic, and individual use, each course consists of several hours of recorded instruction on audiotape cassettes and an integrated course manual containing illustrative and reference material.

For further information on any of the activities described above, interested readers may write to Education Department, American Chemical Society, 1155 16th Street, N.W., Washington, D.C. 20036.—RALPH G. WHITE, *Manager, Continuing Education, ACS.*

Association for the Education of Teachers in Science

The Association for the Education of Teachers in Science (AETS) is a national organization devoted to the improvement of the education of teachers in science; it is an affiliate of the National Science Teachers Association (NSTA). Its stated goals are to

(1) promote the development of better programs for the preparation of science teachers,

(2) work with other national groups in raising professional standards for the science teaching profession through reexamination of teacher certification and accreditation of teacher education institutions,

(3) serve as the organization and the voice for the advancement of teacher education in science,

(4) bring together, in close association, persons responsible for the professional and subject-matter preparation of science teachers,

(5) encourage and study creative methods and techniques in teaching elementary and secondary school science,

(6) build a more favorable picture of teaching, particularly science teaching, as an important and rewarding career,

(7) contribute to the improvement of current programs of study for the master's and doctoral degrees in science education, and

(8) cooperate in international efforts to improve the competencies of science teachers.

The annual meeting of AETS is held during the national convention of NSTA. This meeting serves as (1) a forum through which scientists and educators may consider and discuss current problems in science education and jointly explore possible solutions to these problems; (2) an opportunity for the exchange of ideas, among members, on how to improve further individual professional proficiencies; (3) an occasion to renew friendships and make new ones within the membership; and (4) a time for the annual business meeting of the association.

Regional meetings of AETS members are held semiannually or annually. These meetings provide opportunities for deliberations and discussions of local and regional professional problems. Whenever possible, the national officers of AETS attend and participate in the regional meetings.

The membership of AETS consists largely of college teachers of chemistry, physics, biology, and the earth-space sciences; teachers of science education; supervisors and administrators of science programs in school systems; chairmen of science departments in secondary schools; and elementary and secondary school science consultants.

The *Journal of Research in Science Teaching* is the official journal both of AETS and of the National Association for Research in Science Teaching.

Guidelines for the Doctorate in Science Education is a 12-page report of the AETS Committee on Guidelines for the Doctorate in Science Education.

AETS also publishes a *Newsletter* which contains announcements of association activities, plans, and information of interest to members—PAUL WESTMEYER, *President, AETS, Department of Science Education, Florida State University, Tallahassee, Florida 32306.*

Federation for Unified Science Education

The Federation for Unified Science Education (FUSE) is an association of science teachers and other educators dedicated to testing the working hypothesis that a unified science curriculum is superior to the traditional sequence of separate science courses in achieving the goals of liberal or general education.

Active FUSE members come from throughout the science education community. A large majority of the members are from the United States and are concerned with secondary education (grades 7-12).

There are two basic FUSE tenets:

1. Science is best viewed as a single humanistic enterprise. The separate sciences are convenient research traditions and serve a real function in generating specialized knowledge. However, all the sciences do share a common base of values, a common set of intellectual processes, and a set of concepts that, in historical perspective, are increasingly pervasive throughout the separate sciences.
2. No one set of science instructional materials is best for all school systems. Adoption of instructional materials should be rejected in favor of adaptation of materials into a locally established structure to meet the unique needs, interests, and backgrounds of the local community.

FUSE was founded in September 1966 when representatives of eight high schools involved in unified science curriculum projects met at the Ohio State University Laboratory School. Since then, annual three-day conferences have been conducted in Chicago; Millburn, New Jersey; Monona Grove, Wisconsin; Portland, Oregon; and Moline, Illinois. In addition, open meetings have been a part of four annual NSTA conventions.

The *FUSE Bulletin* is published at irregular intervals and, with the annual conferences and open meetings, promotes communication among members about their mutual concerns in science education. Efforts to proselytize have been limited, although FUSE members have served as consultants to interested groups and have been receptive to requests for school visitations.

FUSE is currently seeking ways to identify potentially interested science educators and to make its resources of people, their experiences, and curricular materials more readily accessible.

The next annual FUSE conference will be held at the P. K. Yonge Laboratory School, University of Florida, Gainesville, in September 1972. Dr. Thomas Gadsden of the P. K. Yonge Laboratory School is chairman of the conference and of FUSE for the calendar year 1972.—VICTOR M. SHOWALTER, *Executive Director, FUSE, Box 5044, Cleveland, Ohio 44101.*

Mathematical Association of America

The Mathematical Association of America (MAA) is devoted to the improvement of content and teaching of undergraduate mathematics. Established in December 1915 by 1045 charter members, the MAA has grown to a membership of over 18,000 individual and 350 institutional members. Through its official publication *The American Mathematical Monthly,* a journal of expository articles at the undergraduate and early graduate levels, *Mathematics Magazine,* a journal designed to be of interest to anyone who has studied mathematics through the introductory calculus level, and several series of expository books; through meetings at both national and local levels; through Visiting Lecturers and Consultants Programs for colleges; through occasional summer seminars for college teachers; and through several active projects to stimulate

curriculum reform and experimentation with various educational media, the association strives to stimulate the widest possible exchange of ideas and experience in mathematics teaching at the college level.

The most active and influential of the MAA projects is the work of the Committee on the Undergraduate Program in Mathematics (CUPM). In its twelve years of existence, with the support of the National Science Foundation, CUPM has enlisted the services of over 200 mathematicians and scientists from 42 states, representing almost all types of universities and colleges and many types of industry. The committee has issued over 50 reports and recommendations and held a large number of conferences on local, state, regional, and national levels, on matters of mathematics curricula for virtually every kind of student having a need for mathematics. At present, CUPM is turning its attention to such matters of current concern as: mathematical opportunities for students from minority groups, the mathematics training of students in technical-occupational programs, "general" mathematics courses for students in two-year colleges, and the impact of the computer on the content of mathematics courses. Any of the approximately 20 currently available CUPM publications can be obtained without charge from: CUPM, P.O. Box 1024, Berkeley, California 94701.

Information concerning the MAA-sponsored Mathematical Competitions at the high school and collegiate levels, the MAA Program of Visiting Lecturers for colleges, and a variety of publications designed to assist students in making educational and career choices may be obtained from the MAA office, 1225 Connecticut Avenue, N.W., Washington, D.C. 20036. Information about the over 50 mathematical films produced by the MAA may be obtained from Modern Learning Aids, P.O. Box 302, Rochester, New York, 14603.—A. B. WILLCOX, *Executive Director, MAA.*

National Association of Biology Teachers

The National Association of Biology Teachers (NABT) was formed in 1938 and incorporated in 1956. It is the only national association specifically organized to assist teachers in the improvement of biology teaching. It is governed by a 24-member Board of Directors consisting of officers, regional directors, editors, and permanent committee chairmen. In 1965 it employed a full-time executive secretary and opened offices in Washington, D.C.

The American Biology Teacher is the official journal of NABT. It is printed monthly except June, July, and August, has a minimum of 64 pages per issue, and is distributed to more than 15,000 members and subscribers here and abroad. This journal carries articles on all facets of biologic education as well as book reviews, audiovisual news, announcement briefs, and editorials.

NABT News & Views is the bimonthly newsletter of the association and is designed to bring information about programs, committee reports, convention news, regional activities, and announcements of interest to the membership. In addition to periodicals, NABT has also developed and widely distributed a number of special publications on plant pathology, microbiology, social implications of biology education, and other topics.

For the past decade, NABT has sponsored a national Outstanding Biology Teacher Award (OBTA) program. OBTA is conducted in every state and represents NABT's attempt to recognize outstanding performance in the classroom and bring this to the attention of the general public. Each year 50 OBTA recipients have been selected and have received a binocular microscope presented by American Optical Corporation.

During the past five years nearly 2,000 teachers have benefited from an annual series of nine three-day Regional Seminars in Biology sponsored by NABT and funded by the National Science Foundation. NABT also sponsors other seminars designed to enhance the subject-matter knowledge of teachers.

The NABT-Bausch & Lomb Award was initiated in 1971. It is designed to recognize outstanding achievement at the junior college (two-year college) level. This annual award of $1,000 is presented to a junior college teacher for a significant contribution to biology education in the two-year college.

Like most associations, NABT has an annual convention. Scheduled each October, the NABT meeting will be held in San Francisco in 1972 and St. Louis in 1973. The convention program is designed not only for secondary school but also collegiate teachers and places heavy emphasis on current topics in biology as well as featuring a number of technique and workshop sessions and a commercial exhibition.

NABT has standing committees on biology and society and on excellence in biology education. It has recently issued statements on the use of live animals in the classroom and has proposed guidelines for standards in biology teaching.

Further information about NABT's seven classes of membership, its publications, and its programs may be obtained from the NABT Executive Office, 1420 N Street, N.W., Washington, D.C. 20005.—JERRY P. LIGHTNER, *Executive Secretary, NABT.*

National Association of Geology Teachers

The National Association of Geology Teachers (NAGT), a member society of the American Geological Institute, was founded in 1938 "to foster improvement in the teaching of earth sciences at all levels of formal and informal instruction, to emphasize the cultural significance of the early sciences, and to disseminate knowledge in this field to the general public."

Each NAGT member may belong to one of the eleven organized sections. Each section has its own officers and activities.

NAGT publishes the *Journal of Geological Education* five times annually. The journal includes reviews of important papers and recently published books, original

articles concerning geological sciences and education, classroom ideas, reports of commissions and councils of other geological societies, film reviews, and a "Bulletin Board" for the profession.

The national association meets each November in conjunction with the annual meeting of the Geological Society of America. A luncheon and business meeting, the presentation of the Neil Miner award for excellence in earth-science education, a timely symposium, and technical papers are usually on the NAGT program. Numerous geological field trips are part of the program of the combined societies. In addition, members may attend the annual meetings of the NAGT sections where geological field trips and presentations of scientific and educational papers are the main activities. In the spring, a national meeting is held in conjunction with the National Association of Science Teachers; a Secondary-School Teachers Award is presented.

Because NAGT is a member society of the American Geological Institute, its members receive *Geotimes*, the news journal of the earth sciences. *Geotimes*, published monthly, carries additional book reviews and a job placement section.

The $8.00 annual dues, of which $.50 is returned to the section, includes subscriptions to the *Journal of Geological Education* and *Geotimes*. Headquarters: 2201 M Street, N.W., Washington, D.C. 20037.— GORDON B. OAKESHOTT, *Past President, NAGT.*

National Association for Research in Science Teaching

The National Association for Research in Science Teaching (NARST) was founded to foster research related to the teaching of science at all school levels, and to help in the process of disseminating the results of research. For many years the journal *Science Education* was the official publication of the association. The official publication today is the *Journal of Research in Science Teaching.*

NARST holds an annual spring meeting. On alternate years it meets with the American Educational Research Association and with the National Science Teachers Association. Dues are $15.00 a year including subscription to the journal, and membership is open to science educators involved and interested in educational research. Most of the approximately 1,000 members hold an earned doctorate. Some areas of immediate concern to members of NARST are related to research in science education curricula, instruction, learning theory, teacher education, and programs for underachievers.

Recently a formal Committee of New Members has examined the role of NARST especially related to members who are school personnel. There is some feeling that the organization should broaden its outlook on research activities to include the acceptance of research that is more action oriented. This interest stems from the association's dedication to the improvement of teaching through research, both through applying the results of research and through direct involvement in research activities.

NARST is directly serviced by and services the Science Education Information Analysis Center at Ohio State University. The organization has direct involvement in a variety of projects such as the UNESCO science equipment program and the Conference on Education and the Environment in the Americas sponsored by the Organization of American States and the American Association of Colleges for Teacher Education.

For further information about NARST write to Ralph Lefler, Department of Physics, Purdue University, Lafayette, Indiana 47907, who is secretary-treasurer. For subscription to the *Journal of Research in Science Teaching* only, write to Journal Circulation Office, John Wiley and Sons, 605 Third Avenue, New York, New York 10016. — FRANK X. SUTMAN, *President, NARST.*

National Council for the Social Studies

The National Council for the Social Studies (NCSS) was founded 51 years ago. Over the years its general purposes have remained the same: to build a strong professional organization for teachers in the field of the social studies so that the profession will have an effective voice in revising and strengthening the organization of the curriculum and the content of offerings in the social studies and in improving instructional materials and teaching strategies. The underlying objective in all activities is to improve instruction in the social studies for the benefit of the pupils in our classrooms.

The major avenues of communication on such professional matters are: (1) the official journal of the NCSS, *Social Education*, (2) an extensive publications program with books and pamphlets covering a wide range of topics, (3) the annual meeting, (4) meetings with local and state affiliated social studies councils, and (5) the operations of the headquarters office which serves as a clearinghouse in addition to the management of NCSS affairs.

While over the years the basic purposes have remained essentially the same, specific areas of concern and activity have varied with changes in society and education. Some idea of present emphases may be gleaned from a brief statement on a few selected current activities.

1. The NCSS has just issued three policy statements for guidance of the profession: "Curriculum Guidelines for the Social Studies," "Standards for Social Studies Teachers," and "Academic Freedom."

2. In preparation are three NCSS position papers: "Racism and Social Injustice," "Social Justice for Women," and "Student Rights."

3. To bring the NCSS closer to its members, NCSS is: (a) cosponsoring with selected state affiliated councils a series of regional meetings, (b) developing a plan for a grassroots field service, and (c) strengthening its working relationships with state and local affiliates.

4. The NCSS has undertaken the responsibility to assist teachers when their academic freedom has been violated and when due process has not been observed.

5. Recent NCSS publications have dealt with: (a) *Values Education: Rationale and Strategies,* (b) *Values and Youth,* (c) *Social Studies Curriculum Development,* (d) *Focus on Geography: Key Concepts and Teaching Strategies,* (e) *Drugs and Youth,* (f) *An Anthology of Readings in Elementary Social Studies,* and (g) *Selected Items for the Testing of Study Skills and Critical Thinking.*

6. Recent special issues of the official journal *Social Education* have dealt with such critical areas as "The Urban Crisis," "Teaching About Canadian Life and Culture," "The Environmental Crisis," "Teaching United States History in the Turbulent Present," "Africa," and "Latin America."

7. A newsletter *The Social Studies Professional,* which covers professional news, is published five times a year.

Membership in the NCSS is open to any interested person on payment of annual dues. Membership is composed of teachers at the elementary, junior high and senior high school levels, and university personnel with a special concern for teacher education.—MERRILL F. HARTSHORN, *Executive Secretary, NCSS, 1201 Sixteenth Street, N.W., Washington, D. C. 20036.*

National Council of Teachers of Mathematics

The National Council of Teachers of Mathematics (NCTM) is the world's largest organization concerned with the improvement of mathematics education in elementary schools, junior and senior high schools, junior colleges, and teacher education colleges. Professional members and subscribers total nearly 80,000. Affiliated local, state, and regional groups now number 170.

The Council's official journals, *The Mathematics Teacher* and *The Arithmetic Teacher,* are issued eight times during the school year. *The Mathematics Teacher* is primarily concerned with the secondary school and college instructional levels, while *Arithmetic Teacher* is devoted to the teaching of mathematics at the elementary school level. The *Mathematics Student Journal,* for students in grades 7-12, and the *Journal for Research in Mathematics Education* are issued quarterly. The *NCTM Newsletter,* a bulletin issued four times yearly to the membership, provides current information about Council affairs, upcoming events, and new publications and materials. The monthly *Bulletin for Leaders* provides advance information on events and publications of special interest to leaders in mathematics education.

Books and pamphlets on a variety of topics were issued during 1970-71: *Historical Topics in Algebra; Mathematics and My Career;* Units 6 (*Mathematical Thinking*), 7 (*Rational Numbers*), and 9 (*Positive and Negative Numbers*) of the Experiences in Mathematical Discovery series; and Volume 2 of the Experiences in Mathematical Ideas series. Another publication, *Piagetian Cognitive Development and Mathematical Education,* represents the proceedings of a conference jointly sponsored by the council and Columbia University, 18-23 October 1970, which was funded by the National Science Foundation.

The NCTM's expanded convention program resulted in nearly 22,000 registrations for 1970-71. In addition to regularly scheduled regional meetings and the annual meeting, a special single-concept conference concerned with "Accountability via Performance Contracting in Mathematics Education" has been planned for late 1971. A conference on inner-city problems and one on the low achiever are examples of recent prototype meetings designed for selected audiences.

Concurrent with the continuing refinement of the council's internal operations, the NCTM is rapidly moving ahead with construction of a new headquarters facility in Reston, Virginia. Ground has been broken, and occupancy is scheduled for the spring of 1973. The new structure will be situated within a campus type of park, to be called "The Center for Educational Associations," which the council and nine other organizations are cooperatively developing.—JAMES D. GATES, *Executive Secretary, NCTM, 1201 Sixteenth Street, N.W., Washington, D. C. 20036.*

National Science Supervisors Association

". . . to provide professional leadership in education"

This motto of the National Science Supervisors Association (NSSA) charges the organization with the responsibility of providing leadership to initiate desirable changes in science programs throughout the country.

Formed in 1960 as a section of the National Science Teachers Association, NSSA has continued to grow and to prosper and now provides a wealth of services to the science supervisor. These include publications, exchange services, arrangement of conventions, and sponsorship of institutes for supervisors.

Publications by NSSA have included such outstanding works as *A Sourcebook for Science Supervisors, Behavioral Objectives in the Affective Domain,* and *Report of the Commission on the Role of the Science Supervisor.* In addition to these the *NSSA Newsletter* is published six times annually. This facilitates the dissemination of material of common interest and concern to science supervisors.

NSSA is also proud of a recent far-reaching project known as Barter and Exchange. This is actually a "matchmaker" service by which science supervisors make available solutions to specific problems and situations faced by other supervisors. We match people who want help with people who will help.

In addition to these types of activities NSSA is responsible for arranging a significant part of the program for the annual meeting of the National Science Teachers Association. Attendance at these meetings gives members a chance to exchange ideas, to discuss

common problems, and to receive serendipitous benefits not possible to list in any formal program.

Another of the annual projects of NSSA is the joint sponsorship with the University of Colorado of the Summer Institute for Science Supervisors. The purpose of this institute is to inform supervisors of the latest developments in science education and to provide opportunity for interchange of information, opinions, and ideas with the leaders of the new science programs. Over 300 science supervisors have attended this institute since its inception in 1961.

It might well be, however, that the most important benefit of membership in NSSA is the joy and the satisfaction in sharing in the objectives of NSSA membership. The supervisor is a leader and a coordinator who works with programs and people. His foremost problem, regardless of his title, is to develop an integrated science program for a school system. Supervisors must constantly bear in mind that the ultimate goal of instruction is to ensure the best possible human product. NSSA's attitude is one of helping people to help themselves. In this way NSSA, with a feeling of pride, truly provides leadership in science education.—FRANCIS X. FINIGAN, *President, NSSA, Director of Science, Public Schools, Winchester, Massachusetts 01890.*

National Science Teachers Association

Organization. The National Science Teachers Association (NSTA), established in 1944, is an associated organization of the National Education Association. The world's largest organization dedicated to the improvement of all areas of science education at all grade levels, NSTA now has over 40,000 members and subscribers.

James V. DeRose, Dennis Chisman, Sheila Haggis, Ralph Schuman, and J. David Lockard reported on science teaching developments worldwide at 1971 NSTA convention in Washington, D.C.

Goals. The NSTA is committed to work for improvement in teaching and learning in all areas of science at all educational levels; to the coordination of interdisciplinary communication among scientists, engineers, and science teachers; to the stimulation of scientific literacy for general education; to the identification and motivation of students capable of careers in science and engineering; to the support of science teachers in their drive for better facilities and conditions for good science teaching; to the creation of a public awareness of the importance of science and technology; and to greater understanding of science as a basis for decisions in numerous questions of public policy.

Publications. *The Science Teacher* (mostly secondary school level), published nine times yearly; *Science and Children* (for elementary and middle school levels), published eight times yearly; and the *Journal of College Science Teaching*, published four times yearly. Other publications include instructional aids, reports, monographs, a how-to-do-it series, a quarterly news bulletin for the membership, and a newsletter, *Centrifuge*, for the Future Scientists of America clubs.

Meetings. The NSTA national convention attracts and serves 6,000-7,000 people each year. The 1972 convention is 7-11 April in New York City. It will feature general sessions with outstanding speakers, seminars and short courses in science, panels and symposia on over 50 topics, 150 contributed papers by members, 30 to 40 "hands-on" workshops with new materials and techniques, and an exposition of over 300 exhibits of the newest in science teaching materials. Several regional conferences or area conventions are held each fall throughout the United States and occasionally in Canada. Special-topic conferences, as on drug abuse and environmental problems, are scheduled when needs and resources emerge.

Committees and Activities. Key committees of NSTA are now at work on several fronts, such as curricular and instructional problems, environmental education, science in the education of urban youth, college science teaching, and international activities. Recent accomplishments of task force groups include a report on

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conditions for good science teaching, a position statement on school science for the '70s, and a report on drug abuse education. Nearing completion is a nationwide study of exemplary facilities for secondary school science teaching and under development is a program of nationwide symposia on "Science, Science Teaching, and the Quality of Man's Living" in 1972.

Teachers at SSMA invitational seminar on models for interdisciplinary studies

Student Programs. NSTA student programs help teachers help students have the experiences of practicing scientists and engineers. Specific offerings include: Future Scientists of America clubs; Tomorrow's Scientists and Engineers with $100,000 in awards and scholarships cosponsored by the Engineers Council for Professional Development and Scholastic Magazines; Youth Science Congresses, cosponsored by NASA; the International Youth Science Fortnight in London, England; and several publications.

Sections. Special-interest needs are served by the following organizations affiliated as Sections of NSTA, each with its own separate dues and program of offerings: Association for the Education of Teachers in Science; Council for Elementary Science International (CESI); National Association for Industry-Education Cooperation (NAIEC); National Science Supervisors Association. — ROBERT H. CARLETON, *Executive Secretary, NSTA, 1201 Sixteenth Street, N.W., Washington, D. C. 20036.*

School Science & Mathematics Association

School Science & Mathematics Association (SSMA) is one of the oldest professional societies in science and mathematics education. It originated in 1900 as an organization for secondary physics teachers. Three years later it was reorganized to include mathematics teachers and teachers of other science subjects. It was known for nearly 70 years as the Central Association of Science & Mathematics Teachers, Inc. Currently the organization consists of about 2,000 teachers, from the elementary level through the college level, representing mathematics, physical science, biological science, behavioral science, and social science.

Although the history for SSMA is a long one, the organization has never been large in terms of numbers or national in terms of members from the various regions of the U. S. The organization was incorporated in Illinois, the state which still can boast of the largest number of members. Currently there is a national membership committee and regional structure aimed at enlarging the membership in all regions.

SSMA publishes *School Science & Mathematics* nine times a year. The journal is distributed widely all over the world. The national convention is held each November. In the past the conventions have always been held in the midwest—St. Louis, Detroit, Chicago, Milwaukee. The 1972 convention will be held in Chicago. However, in 1973 the meetings will be held in Houston —our first venture away from the heartland of our membership.

The association has also sponsored a variety of regional seminars. A major effort is currently being expended with an invitational seminar program. As a result of the seminars, position papers are prepared and published for reaction from the membership and other interested readers.

Currently efforts are being expended to de-emphasize the traditional disciplines. Seminars, the annual conventions, and journal writings are focusing upon the interdisciplinary projects which include a consideration of science and mathematics from a societal perspective. Some are focusing upon environmental problems and some of the newer schemes of organization and teaching style as the major thrust for SSMA. We see the spectrum of our membership as making such a focus meaningful and possible.

Although the central office is scheduled to move during 1972, the current office is located in Bloomington, Indiana (P.O. Box 246). Donald Winslow of Indiana University is the current executive secretary.—ROBERT E. YAGER, *President, SSMA.*

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